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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,385	12/31/2003	Lance Weston	H0006069-555	8983

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HONEYWELL INTERNATIONAL, INC.  
LAW DEPARTMENT  
101 COLUMBIA ROAD  
MORRISTOWN, NJ 07692

EXAMINER
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DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

MAIL DATE	DELIVERY MODE
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07/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/750,385	<b>Applicant(s)</b> WESTON ET AL.	
	<b>Examiner</b> Tuan T. Dinh	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 27-89 is/are pending in the application.
- 4a) Of the above claim(s) 1-12, 27-61 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 71-75 and 85-89 is/are allowed.
- 6) ☒ Claim(s) 62-70 and 76-84 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure of the “circuit protection system”, claims 62, 66, 71, 76, 80, and 85, line 1, and printed circuit board, claims 62, 66, 71, 76, 80, and 85, line 3” must be shown or the feature(s) canceled from the claim(s).

Figures 1-2 do not show a structure of the circuit protection system and the printed circuit board, please verify.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 63, 67, 72, 77, 81, and 86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 63, lines 2-4 is unclear. What does applicant mean of "second edge of the trace and first edge of the second cap are both substantially equal to X"? What is a dimension or value of X to be comparable to either the second edge of the trace and the first edge of the second cap.

Rejected claims 67, 72, 77, and 88 are similar to claim 63.

Please clarify.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 62-70, 76-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Devoe (U.S. Patent 6,690,558)

As to claims 62, 76, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:

a printed circuit board (48, column 4, line 24) having a SMT component (30; 40) mounted on, the component (30; 40) having first and second end caps (14), and each caps having a first edge;

a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively.

As to claims 66, 80, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:

a printed circuit board (48, column 4, line 24) having first and second SMT components (30, 40) mounted on, the components (30, 40) having first and second end caps (14), and each caps having a first edge;

a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the

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edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively, and said plane intersecting said first edge of said first end cap of said second surface mounted component (40) and intersecting said first edge of said second end cap of said second surface mounted component, said first edge of said trace being disposed in parallel spaced relation to said first edge of said first end cap of said second surface mounted component and said second edge of said trace being disposed in parallel spaced

Regarding claims 63-65, 67-70, 77-79, and 81-84, Devoe discloses the second edge of the trace being substantially the same to the first edge of the second cap.

***Allowable Subject Matter***

6. Claims 71-75, and 85-89 are allowed.

The following is an examiner's statement of reasons for allowance: the prior arts do not teach or suggest in combination of the system having a second conductive trace on a printed circuit board having first and second opposed edges extending intermediate first and second end caps of a third surface mount component, said first and second opposed edges of said second conductive trace being coplanar and thereby defining a plane, said plane intersecting said first edge of said first end cap of said third surface mount component and intersecting said first edge of said second end cap of said third surface mount component, said first edge of said second trace being disposed

in parallel spaced relation to said first edge of said first end cap of said third surface mount component and said second edge of said second trace being disposed in parallel spaced relation to said first edge of said second end cap of said third surface mount component (claims 71 and 85).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments with respect to claims 62-89 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshidome et al. discloses related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Dinh  
June 20, 2007.

A handwritten signature in black ink, appearing to read 'Tuan T. Dinh', with a long, sweeping horizontal line extending to the right.

TUAN T. DINH  
PRIMARY EXAMINER